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FIGURE 1

DATA SET 1							DATA SET 2						
General Gene Marker Type	Examples of Gene Types	Gene Marker CYP	Polymorphism	Links with Cancer susceptibility	Links with higher risks of cancer susceptibility	Homozygote or heterozygote relative to wild type	Genetic Susceptibility ranking				Foods and other materials to avoid	Dietary and lifestyle advice	
							Reduce susceptibility	Normal susceptibility	Moderate increase in susceptibility	Higher susceptibility			Very High susceptibility
Type 1	Genes that code for enzymes responsible for the detoxification of xenobiotics in Phase I metabolism											Reduce consumption of sources of PAHs (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Consume food products such as for example vegetables and fruit, e.g. cruciferous and allium family of vegetables.
			Cyp1A1-4 (Wild type)	Colonial, urinary bladder, breast, oral cavity, stomach, and lung cancers		Homozygote		YES				Avoid consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Increase consumption of food products known to induce Phase II metabolism, e.g. cruciferous and allium family vegetables.
			Op1A1-C	Colonial, urinary bladder, breast, oral cavity, stomach, and lung cancers		Homozygote			YES		YES	Avoid consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Increase consumption of food products known to induce Phase II metabolism, e.g. cruciferous and allium family vegetables.
			3a-4a polymorphism	Colonial, urinary bladder, breast, oral cavity, stomach, and lung cancers		Heterozygote			YES		YES	Avoid consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Increase consumption of food products known to induce Phase II metabolism, e.g. cruciferous and allium family vegetables.
		MAT1				Heterozygote			YES			Avoid consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Increase consumption of food products known to induce Phase II metabolism, e.g. cruciferous and allium family vegetables.
			MAT1*4 (wild type)			Heterozygote		YES				Reduce consumption of potential procarcinogens (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Consume food products such as for example vegetables and fruit, e.g. cruciferous and allium family of vegetables.
						Heterozygote						Reduce consumption of potential procarcinogens (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Increase consumption of food products known to induce Phase II metabolism, e.g. cruciferous and allium family of vegetables.
			MAT1*10	Colon cancer		Heterozygote					YES	Avoid consumption of sources of Xenobiotics (e.g. PAH) found in, for example, char-grilled red meat and smoked fish.	Increase consumption of food products known to induce Phase II metabolism, e.g. cruciferous and allium family of vegetables.

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Figure 2

